

### **Amendments to the Specification:**

Kindly replace the second full paragraph on page 3 of the specification with the following amended paragraph.

--Switched-reluctance generator efficiency is characterized in terms of operating speed, power production and excitation angles. The most efficient turn-off angles are a function of power level and speed, hence, they can be represented through a curve fitting function. Once a power requirement  $P^*$  and input speed  $\omega$  are known, a turn-off angle can be determined according to this function. Once the turn-off angle is known, the turn-on angle can be found using an algorithm. The turn-on angles are the output of the closed loop power control algorithm. By choosing the most efficient turn-off angle at the outset, we can say that the turn-on angle which provides the required power level for that operating condition is the most efficient one. The inventive technique provides easy implementation of the control system by virtue of being closed loop. The excitation angles are easily optimized by determining the efficiency-optimal excitation parameters at only four operating points. The new control technique provides an efficient SRG controller that is easy to implement.—

Please add the following new paragraph on page 8, at line 15, following the first full paragraph on the page:

--In the Fig. 10 algorithm, the power requirement  $P^*$  is summed, through the  $\Sigma$  function, with the available power  $P$  and passed through a proportional integral controller 2 to

assess the trend of successive power requirements and adjust the turn-on angle accordingly. Where there is a power surplus, the turn-on angle is increased proportionally, where there is a power deficit the turn-on angle is decreased proportionally. This power requirement is then used, in conjunction with the  $\theta_{on}$  result set in accord with  $\theta_{cond}$ , to select the optimum turn-on angle subject to a limiter function 4. The limiter is used to prevent destructive changes in the operation of the switched reluctance generator.--